

Interactions in a Fermi Gas -- Polarization  
Phenomena, Correlation Energy, and Electron  
Condensation, by Wilhelm Naegele.

GERMAN, per, Z fuer Naturforschung, Vol V, 1950, pp 192-208.

AEC-tr-5269

Sci - Phys

Jan 63

218,835

list 74

The Theory of Ultrasonic Absorption in Liquids, by  
A. Gierer and K. Wirtz, 16 pp. UNCLASSIFIED

Full translation.

GERMAN, per, Z/<sup>itschrift</sup> Naturforsch, Vol 7A, 1950, pp 270-275,  
(W.O.28784).

AEC Tr 2001 and 1495

Scientific - Physics, chemistry, ultrasonic, liquids

Jan 53 CES/DRX

Mass Spectrometric Determinations of Argon From Potassium  
Salts, by M. Bahl, J. Hilby.

GERMAN, per, Z. Naturforschung, Vol Vn, 1950,  
pp 404, 405.

AEC Tr 522  
AEC Tr 620

12,958

Scientific - Min/Metals  
Aug 1951 GTS

Exchange and Other Two-center Integrals  
with 2s and 2p Functions, by Hermann-Josef  
Kopineck, 16pp.

GERMAN, per, Zeitschrift fur Naturforschung,  
Vol 5a, No 8, 1950, pp 420-431.

CFSTI TT-64-20133.

322,681

Sci - Physics  
Apr 67

Mass Dependence of Electron Liberation by  
Isotopic Ions by Werner Ploch, 2 pp.

Full translation.

GERMAN, per, Z Naturforsch, No 5A, 1950, pp 570,571.

AEC Tr 1205

Scientific - Physics

S. L. A.

The Theory of a Wall-Stabilized  
Arc File, by Georg Schmitz.  
GERMAN, per, Z. Naturforsch Pt A,  
Vol V, 1950, pp 571.  
NASA TT F-10,489

U. S. GOVERNMENT USE ONLY

Sci-Materials

Jan 67

317,869

Anomalous D<sup>+</sup> And OD<sup>+</sup> Ion Mobility in Heavy Water, by  
A. Ciceri.

GERMAN, per, Z. Naturforsch., Vol Va, No 11, Nov 1950,  
pp 581-589.

AEC Tr 1688

Scientific - Chemistry

Sep 53 CTS

5703

Propagation of Electric Waves Along Stratified  
and Continuous Varying Plasmas, by  
W. O. Schumann, 12 pp.

~~Schuman~~,  
~~RÖHRSCHMIDT~~, per, Z. fuer Naturforschung, Vol Va,  
1950, pp 612-617. 9676985

AFCRL Rec X Lib  
E-T-R-C-62-14

Sci - Phys  
Jun 62

200, 940

Production of X-Ray Flash Interferences on  
Polycrystalline Material, by W. Schaffs, 3 pp.

GERMAN, per, Zeitschrift Naturforschung, Vol Va,  
1950, pp 631-632. (9207964)

A.C.S.I.L. Tr 1526

Sci - Phys  
Jun 63

Actomyosin and Its Components, by H. Partzehl,  
Gerhard Schramm, Hans H. Weber, 41 pp.

Full translation.

GERMAN, per, XIII Zeitschrift fuer Naturforschung,  
Vol Vb, No 2, 1950, pp 61-74.

CIA/RDD/X-873

Scientific - Chemistry

Jun 53 CTS

2789

On the So-Called "S-Hexachlorocyclohexane." III (1),  
by R. Riemenschneider, G. Ottmann, 15 pp.

GERMAN, per, Z. Naturforschung, Vol V b, 1950,  
pp 307-311.

Sci - Chemistry  
Mar 1957 CTS/dex

8  
S.L.A. Tr No 537/1955  
S.L.A. 77-64-10151  
45, 881

Cylindrical Arc Columns, by  
Georg Schmitz.  
GERMAN, per, Zeit Naturforsch Pt A.  
Vol V, 1950, pp 571.  
\*NASA TT F-10, 469

Sci-Mechanical, Industrial Civil and Marine  
Engr  
Jan67  
U. S. GOVERNMENT USE ONLY

Ehrhardt, H. and Osberghaus, O.  
MASS SPECTROMETRIC EXAMINATION OF HYDROCARBONS AT HIGH TEMPERATURES (Massenspektrometrische Untersuchungen von Kohlenwasserstoffen bei Hohen Temperaturen). (1960) [12]p. 10 refs.  
Order from SLA m132.40, p133.30 61-10540

Trans. of Z[eitschrift für] Naturforschung (West Germany) 1958, v. 13a [no. 1] p. 16-21.

The mass spectra of nine saturated hydrocarbons with 5, 6 and 7 C atoms are studied in the temperature range between 100 and 900°C. For measurement the walls of the ionization zone of the ion source in which the gas to be studied is present under a pressure of ca.  $10^{-3}$  Torr. can be heated to ca. 1000°C. Gold serves as the wall material. For one of the hydrocarbons (2, 2-dimethylbutane) an additional measurement was made of how the spectrum changes when the walls of the ionization zone are clad with a cracking catalyst. The catalyzed methane formation could be (Physics--Spectroscopy, 12 May 61) (over)

- 61-10540
1. Hydrocarbons--Spectrographic analysis
  2. Mass spectrometers--Applications
- I. Ehrhardt, H.  
II. Osberghaus, O.

151455

Office of Technical Services

On the Theory of the Thermoelectric Effects in  
Semi-Conductors, by Otfried Madelung, 11 pp.

GERMAN, per, Z Fuer Naturforsch, Vol XIIIa,  
No 1, 1958, pp 22-25.

Engg Res Devel Lab T-381

Sci - Phys, Electronics

Dec 58

78,280

Pahl, M. and Weimer, U.  
THE REACTION  $\text{He}_2^+ + \text{Ne} \rightarrow \text{Ne}^+ + 2\text{He}$  IN A POSITIVE COLUMN (Die Reaktion  $\text{He}_2^+ + \text{Ne} \rightarrow \text{Ne}^+ + 2\text{He}$  in der Positiven Säule). [1960] [5]p. 11 refs.  
Order from SLA m\$1.80 phs1.80 61-10539

Trans. of Zeitschrift für Naturforschung (West Germany) 1958, v. 13a [no. 1] p. 50-51.

61-10539

1. Helium--Chemical reactions
2. Neon--Chemical reactions

I. Pahl, M.

II. Weimer, U.

151454

Office of Technical Services

(Chemistry--Physical, TT, v. 5, no. 8)

Herzog, W. and Dornenburg, E.  
THE USE OF METHYL CHLORIDE FOR MASS SPECTROMETRIC ISOTOPE ANALYSIS OF CHLORINE (Die Verwendung von Methylchlorid zur Massenspektrometrischen Isotopenanalyse von Chlor).  
[1960] [6]p. 12 refs.  
Order from SLA m\$1.80 ph\$1.80 61-10538

Trans. of Z[eitschrift für] Naturforschung (West Germany) 1958, v. 13a [no. 1] p. 37-52.

151453

61-10538

1. Chlorine isotopes-- Spectrographic analysis
  2. Methyl chlorides-- Applications
  3. Mass spectrometers-- Applications
- I. Herzog, W.  
II. Dornenberg, E.

Office of Technical Services

(Physics--Spectroscopy, TT, v. 5, no. 8)

State of Ionisation and Radiation From Impurity  
Gases in a Hydrogen Plasma, by G. Knorr.

GERMAN, per, Z Fuer Naturforschung, Vol XIIIIA, 1958,  
pp 71-73.

\*AEC

Sci - Chem, Phys

Feb 59

The Behavior of Plane Ultrasonic Waves in  
Homogeneous Magnetized Single Crystals,  
by G. ~~SM~~ Simon, 10 pp.

GERMAN, per, Z Naturforsch, Vol XIIIa, No 1,  
1958, pp 34-39.

ATS-76M37G  
R75-409-GJ

Sci  
Vol 4, No 1

198, 318

Mar 62

Production of Crystals From Decomposable Compounds  
by Albrecht Fischer, 21 pp.

GERMAN, per, Z fuer Naturforsch, Vol XIIIa, 1958,  
pp 105-110. 9077279

ABC UCRL-Trans-612(L)

Sci & Chem

ACSL Tr 1667

Jul 61

157, 439

Ein Verfahren zur Bestimmung der Wärmeleitfähigkeit Dunner Proben bei Hohen Temperaturen.  
Aus dem Institut für Physikalische Chemie  
der Universität Münster, by Franz Ph. Pott.  
GERMAN, per, Zeit Naturforschg, No 13a,  
1958, pp 116-125.  
\*CFSTI TT 67-59059

Jun 67

Electrotransport Measurements in the Alpha-Phase  
of the Ag-Zn System, by H. G. Feller.  
GERMAN, per. Z Naturforsch, No 13a, 1958, pp 152-  
160.  
\*NBS TT 70-57434

Sci-Mat  
Aug 70

Zone-Electrophoretic Research on Hemolymph Proteins  
of Insects in Different Stages of Larva Development,  
by J.M. Denuce.

GERMAN, per. Z. Naturforsch., Vol. 13b, 1958,  
pp 215-218  
IRS/Ref. C-4121

Sci -  
July 1967 334-418

<p>Ewald, H., Felkel, G. and others. AGE DETERMINATIONS OF ROCKS USING THE RUBIDIUM-STRONTIUM METHOD. [1960] 2p. Order from ATS \$4.50 Trans. of Zeitschrift für Naturforschung (West Germany) 1958, v. 13a, no. 3, p. 235.</p> <p>146,949</p> <p>(Earth Sciences--Geology, TT, v. 5, no. 5)</p>	<p>61-12413</p> <p>1. Geological time-- Determination 2. Rock--Physical properties 3. Rubidium--Applications 4. Strontium--Applications I. Ewald, H. II. Felkel, G. III. ATS-21M47G IV. Associated Technical Services, Inc. East Orange, N. J.</p> <p>Office of Technical Services</p>	
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Emission and Absorption of Long-Wave Infrared  
Radiation by Germanium in a Photoconductive State,  
by F. R. Kesseler, 19 pp.

GERMAN, per, Z Naturforschung, Vol XXXIa, No 4,  
1958, pp 295-302.

SLA 59-10724

Sci - Phys  
Sep 59  
Vol 2, No 1

97790

Manganesepentacarbonylhydrogen,  $\text{HMn}(\text{CO})_5$   
by W. Hieber, G. Wagner.  
GERMAN, per, Zeit fur Naturforschung Vol XIIIb  
No 6, 1958, pp 339-347.  
SLA TT 64-30116

May 67 325,022

Production of Helium and Argon in Iron by High Energy Protons, by O. A. Schaeffer, J. Zahringer,  
7 pp.

GERMAN, per, Z Naturforsch, Vol XXXIa, 1958,  
pp 346, 347.

ABC BNL 3495

Sci - Chem

Jan 59

79,569

A Volume Effect by Corrosion of Silicon Single Crystals, by Hansjochen Benda, 4 pp.

GERMAN, per, Z. Naturforschung, Vol XIIIa  
1958, pp 354-355. 9093908

A AEC UCRL-Tr-830

Sci - Phys  
Sep 62

210, 931

Shadows of Dislocation Lines in X-Ray Diagrams,  
by G. Borrmann, W. Hartwig, H. Irmser, 10 pp.

GERMAN, per, Z fur Naturforschung, Vol XIII A,  
No 5, 1958, pp 423-425.

SLA 60-18797

Sci

Apr 61

146,169

Geometrical Influence on the Transverse Magnetic Resistance Effect in Rectangular Semiconductor Plates,  
by Hans-Joachim Lippmann, Friedrich Kuhrt, 26 pp.  
GERMAN, per Z fuer Naturforschung, Vol XIIIa,  
1958, pp 462-474. 9226599  
AEC-UCRL-Tr-1088 (L)

PMG/ENG.

Sci-Electr  
Jan 65

271,817

The Effect of Geometry on the Hall Effect in the  
Case of Rectangular Semiconducting Plates, by  
Hans-Joachim Lippmann, Friedrich Kuhrt, 31 pp.

© GERMAN, per, Z Naturforsch, Vol XIIIa, 1958,  
pp 474-483.

AEC UCRL-Trans-490(L)

195542

Sci - Math  
9 Jan 61  
List 46

Franz, Walter.

THE INFLUENCE OF AN ELECTRIC FIELD ON AN  
OPTICAL ABSORPTION EDGE. [1961] 13p. 3 refs.  
Order from SLA \$1.60

62-14353

I. Franz, W.

Trans. of Z[eitschrift für] Naturforschung] (West Germany) 1958, v. 13a [no. 6] p. 484-[489].

DESCRIPTORS: \*Electric fields, \*Optics, \*Absorption, Absorption spectra, \*Electrons, Penetration, Frequency modulation, Modulation, Frequency, \*Crystals.

In an electric field on the order of magnitude of  $10^5$  to  $10^6$  v/cm, one may expect a change in the absorption edge which consists of a broadening of the base of the edge at the expense of higher frequencies. One can understand this effect, either as the penetration of electrons into the forbidden band (the step preceding the internal field emission), or as a frequency modulation (Physics, TT, v. 8, no. 3) (over)

Office of Technical Services

The Direct Production of Electron Pairs by  
Recoilless, by J. H. Letjens, 12 pp.

ANNAL, phys. der Naturforschung, Vol XIIIa, 1958,  
pp 510-514.

SCL T-272

Sci - Electron.  
Jan 60

104707

Kauer, E. and Rabenau, A.  
INFORMATION CONCERNING THE SEMICONDUCTOR  
BEHAVIOR OF THE CHALCOGENIDES OF ALUMI-  
NUM, GALLIUM AND INDIUM. [1962] Sp. 24 refs.  
Order from SLA \$1.10

63-10880

Trans. of Zeitschrift für Naturforschung (West  
Germany) 1958, v. 13a, p. 531-536.

DESCRIPTORS: \*Semiconductors, \*Aluminum com-  
pounds, \*Gallium compounds, \*Indium compounds,  
\*Chalcogenides, Chemical bonds, Band spectrum,  
Temperature.

It is confirmed by optical measurements that all  
chalcogenides of aluminum, gallium and indium of the  
type  $A_2III_3IV$  possess semiconductor character. The  
band intervals and their temperature dependences are  
given and compared with the results of other authors.  
(Physics--Solid State, TT, v. 10, no. 2) (over)

63-10880

I. Kauer, E.  
II. Rabenau, A.

Bureau of Technical Services

Some Studies of a High Frequency Source, by R. Holtz,  
H. Lob, UNCLASSIFIED

GERMAN, per, Z. fur Naturforschung, Vol XIII, No 8,  
Aug 1958, pp 602-608, 9076954

Sci - Physics  
Dec 59

CIA/FDD X-3796

103435

103435

Scandium 45 as Spallation Product of the Cosmic  
Ray Rays in Iron Meteorites, by H. Wanke,  
pp 19-61.

GERMAN, per, Z Naturforsch, Vol XIIIa, Aug 1958,  
pp 645-649. *See*

AEC AFORL TR-60-411

Sci  
Sep 61

166, 206

62-14475

Barth, H.  
MONOCHROMATIZATION OF AN X-RAY SPEC-  
TRUM LINE. [1962] [60]p. 35 refs.  
Order from SLA \$5.60

I. Barth, H.

62-14475

Trans. of Zeitschr[ift] fur Naturforschung (West  
Germany) 1958, v. 13a, no. 8, p. 680-698.

DESCRIPTORS: \*X-ray spectrum, \*Monochromatic  
light, Resolution, Single crystals, \*Quartz crystals,  
Crystal structure, Lattices, X-ray diffraction  
analysis.

Partial regions with a spectrum width of 0.02XB of  
the X-ray spectrum can be screened out by means of  
suitably arranged diaphragms on lattice plane 2334  
of a particularly good quartz single crystal. Thus,  
further monochromatization of the  $Cu_{K\alpha_1}$ -line to  
 $1/30$  of its "natural" line half-width is possible.  
Various new types of experimental arrangements are  
(Physics--Solid State, TT, v. 8, no. 9) (over)

Office of Technical Services

Measurement of the Self Absorption of  $\beta$ -Rays with  
A  $4\pi$  Counter, by H. Meister,  
GERMAN, p. Zeitschrift für Naturforschung, Vol XIIIa,  
1958, pp 722-740, 9072293.

ACSL No 1217

Sci

Nov 60

131, 435

Activation of Foils in a Thermal Neutron  
Field, by H. Meister.  
GERMAN, per, Zeitschrift fuer Naturforschung.  
Ausgabe A, Vol 13, 1958, pp 738-740.  
NTC-71-14861-20H

Feb 72

Pahl, M. and Weimer, U.  
FLOW DISCHARGE MASS SPECTROMETRY (Zur  
Massenspektrometrie an Glimmentladungen). [1960]  
[18]p. 25 refs.  
Order from SLA m\$2.40, ph\$3.30 61-10537

Trans. of Z[eitschrift für] Naturforschung (West  
Germany) 1958, v. 13a [no. 9] p. 745-753.

The connection of a direction-focusing 60° mass  
spectrometer to the stationary positive low pressure  
column for the purpose of measuring ion flow rates is  
described. Ions are obtained from the plasma by  
ambipolar effusion. Ions which have very different  
mobilities diffuse with different energies. Such energy  
differences are established by a countercurrent method  
and measured between  $\text{Ne}^+$  -  $\text{Ne}_2^+$ ,  $\text{Ne}^+$  -  $\text{N}_2\text{H}^+$ ,  
 $\text{He}^+$  -  $\text{He}_2^+$ . The isotopes of neon have the same energy  
within the accuracy of measurement achieved. Quantita-  
tive evaluation shows that no volume recombination  
processes are observed in He and Ne under the condi-  
tions selected. (Author)  
(Physics--Spectroscopy, TT, v. 5, no. 7)

61-10537

1. Glow discharges--Ionizing  
effects
  2. Mass spectrometers--  
Applications
  3. Gas discharges--  
Spectrographic analysis
- I. Pahl, M.  
II. Weimer, U.

148,534

Office of Technical Services

Pahl, M. and Weimer, U.

FORMATION OF  $\text{He}_2^+$  AND  $\text{Ne}_2^+$  IN A STATIONARY  
POSITIVE LOW PRESSURE COLUMN (Zur Bildung von  
 $\text{He}_2^+$  und  $\text{Ne}_2^+$  in der Stationären Positiven  
Niederdrucksäule). [1960] [9]p. 19 refs.  
Order from SLA m\$1.80 ph\$1.80 61-10536

Trans. of Z[eitschrift für] Naturforschung (West  
Germany) 1958, v. 13a [no. 9] p. 753-757.

Using an apparatus recently described (discharge tube  
connected to a mass spectrometer) ion effusion flows  
from the stationary positive column are measured in  
 $\text{He}$  and  $\text{Ne}$  glow discharges. The effusion flow of a  
specific type of ion is proportional to its rate of forma-  
tion in the plasma. The formation ratios of  $\text{He}_2^+/\text{He}^+$   
and  $\text{Ne}_2^+/\text{Ne}^+$  are shown in relation to total pressure  
(0.1-5 Torr) and the measured curves are discussed.  
(Translator)

(Physics--Spectroscopy, TT, v. 5, no. 7)

61-10536

1. Glow discharges--Ionizing effects
  2. Mass spectrometers-- Applications
  3. Gas discharges-- Spectrographic analysis
- I. Pahl, M.  
II. Weimer, U.

148,533

Office of Technical Services

The Effect of Oxygen, Hydrogen, and Water Vapor  
on the Electrical Conductivity of Barium Oxide and  
Barium-Strontrium Oxide, by J. Randolph, 24 pp.

In GERMAN, per, Zeitschrift fuer Naturforschung,  
Vol XIIIa, 1958, pp 757-767. 9209174

AEC-UCRL-Tr-929 (L)

Sci - Chem

Jul 63

235,702

Barth, H. and Hoermann, R.  
APPLICATION OF THE PARALLEL BEAM METHOD  
OF IRRADIATION TO X-RAY EXAMINATION OF THE  
INTERIOR OF A CRYSTAL. [1961] 7p. 8 refs.  
Order from SLA \$1.10 61-18916

Trans. of Zeitschrift für Naturforschung (West  
Germany) 1958, v. 13a, no. 9, p. 792-794.

DESCRIPTORS: \*Quartz crystals, \*Silicon, \*Crystals,  
X-ray diffraction analysis, Monochromatic light,  
Bremsstrahlung, Deformation.

(Physics--Solid State, TT, v. 6, no. 10)

61-18916

I. Barth, H.  
II. Hoermann, R.

157208

Office of Technical Services

Some Experiments on the Diffusion of  $Xe$ -133 Out  
Of Uranium Oxides, by R. Lindner, H. J. Matzke,  
3 p.

GERMAN, per, Zeit Naturforsch., 1958, Vol XIIIa,  
pp 794-796.

ADS-68L33G

Sci  
Mar 60  
Vol 2, No 11

109,656

Influence of Polarization of the Semiconducting  
Properties of the Al<sub>n</sub>B<sub>V</sub> - Compounds, by O. G.  
Folberth, 18 pp.

GERMAN, per, Z Naturforsch, Vol XIII A, 1958, pp  
856-865.

CIA/FDD XX-629  
NOT RELEASABLE TO FOREIGN NATIONALS

Sci - Chemistry  
Aug 59

USIB INTERNAL USE ONLY

93,422

Richter, H. and Herre, F.  
THE STRUCTURE OF SOLID AMORPHOUS AND MOLTEN SELENIUM IN THE TEMPERATURE RANGE OF -180 to 430° C. [1963] 16p.  
Order from ATS \$18.50 ATS-76Q67G

Trans. of Zeitschrift für Naturforschung  
(West Germany) 1958, v. 13a, p. 874-885.

**DESCRIPTORS:** Solids, Melting, \*Selenium, Temperature, Crystal structure.

(Physics--Solid State, TT, v. 10, no. 1)

63-17112

I. Richter, H.  
II. Herre, F.  
III. ATS-76Q67G  
IV. Associated Technical  
Services, Inc.,  
East Orange, N. J.

Office of Technical Services

Structure of Amorphous Germanium and Silicon,  
by H. Richter, G. Breitling.  
GERMAN, per, Zeits. fur Naturforsch., Vol 13a,  
1958, pp 988-996, P911066067  
AEC AERE-tr-1059

ATS 1201-GJ

Sci/Materials  
Mar 67

318,580

The decay of  $^{180}\text{Ta}$ . Part II, by Von P. Eberhardt,  
GERMANY, per, Z Naturforsch 13a, 1958, pp 1004-.  
\*AEC/ORNL-Tr-2226

Sci/  
Nov 69

Electrokinetics of Liquid Metals, by A. Klemm,  
14 pp.

GERMAN, per, Z Naturforsch, Vol XIIa, 1958,  
pp 1039-1043.

ADC EP-tr-314

Sci  
Feb 60

107,540

The Metabolism of p-Aminobenzoic Acid, Folic Acid  
and Aminopterin in Enterococcus, by A. Wacker,  
M. Ebert, H. Kolm, 19 pp.

GERMAN, per, Z. fuer Naturforschung, Vol XIIIb,  
1958, pp 141-147.

NIH 12-4

Sci - Medicine  
Jan 60

105,296

The Electron Microscopic "Staining" of Collagen  
and the Development of a Highly Subdivided Gross  
Striation, by K. Kuhl, W. Grassmann, U. Hofmann,  
22 pp.

GERMAN, per, Z. Naturforsch, Vol XIIIb, 1958,  
pp 154-160.

NID 1-8-61

Sci - Med  
Mar 61

141, 635

On the Origin of Promitochondria and Their  
Development Into Functioning Mitochondria  
in the Cells of Embryonic and Tumor Tissues,  
by N. Weissmuller, 8 pp.

GERMAN, per, Z fuer Naturforschung, Vol XIIIb,  
No 4, 1958, pp 203-205.

NIH 3-40-60

Sci - Med

May 60

117,324

Biosynthesis of Carotenoids by Chlorella, IV.  
Carotene Synthesis of a Chlorella-Mutant by  
Anaerobic Exposure, by Hedwig Claes, 6 p.

GERMAN, per, Zeit für Naturforschung, 1958,  
Vol XIIIb, No 4, pp 222-224.

SLA 60-10718

Sci

May 60

116, 714

Vol 3, No 4

The Morphology of Collagen: Cross Structure,  
Elementary Fibrils and Arrangement in the  
Cellular Association, by T. Nemetschek, 32 pp.

GERMAN, per, Z fur Naturforschung, Vol XIIIb,  
No 4, 1958, pp 225-234.

SLA 61-10010

S<sub>c</sub>i

146,179

Apr 61

OTS, Vol V, No 1

ON THE SUBMICROSCOPIC STRUCTURE OF THE CELL NUCLEUS  
OF EHRLICH'S ASCITES CARCINOMA OF THE WHITE MOUSE,  
BY W. NIKLOWITZ, 4 PP.

GERMAN, PER, Z NATURFORSCH, VOL XIIIIB, NO 7, 1958,  
PP 454-456.

NIH 7-9-62

SCI - BIOLOGY

OCT 62

213,055

The Existence of Boron Nitride Intercalation Compound  
by Ruedorff, E. Stumpf, 4 pp.

GERMAN, per, Z Naturforschung, Vol XIIIb, No 7, 1958,  
p 459

SIA 59-10735

Sci - Chem  
Sep 1959  
Vol 2, No 1

97,289

A Stable, Mesomeric Oxygen-Carbon-Nitrogen Radical, the 4-Cyano-2, 6-ditert.-butyl-phenoxyl-(1), by K. Ley, K. Scheffler, A. Rieker, E. Muller.

GERMAN, per, Z. Naturforsch, Vol XIIIb No 7, 1958,  
pp 460, 461.

NRCC TT-851

Sci - Chemistry  
Jan 61

136,412

Heterocyclic Compounds in the Metabolism. VII. On  
the Biosynthesis of Riboflavin, by F. Korte, H. U.  
Aldeg, H. G. Schicke, 3 pp.

GERMAN, per, Z Naturforschung, Vol XXXb, No 7,  
1958, pp 463, 464.

SLA 59-10531

Sci - Med  
Sep 59  
Vol. 2, No 2

97941

Catalase Content, Fermentation and Respiration  
in Cell Culture According to Dulbecco-Vogt, by  
O. Wartburg, K. Grawein, A. W. Geissler, 7 pp.

GERMAN, per, Zeitschrift fuer Naturforschung,  
Vol XIIIb, No 9, 1958, pp 588-590.

MRK 4-26-60

118,913

Sci - Medicine  
Jun 60

Mammometric X-ray Actinometer and the Effect of  
X-Rays on the Fermentation of Cancer Cells, by  
O. Warburg, W. Schnroder, H. S. Gewitz, W. Volker,  
17 pp.

GERMAN, per, Zeitschrift fuer Naturforschung,  
Vol XIIIb, No 9, 1958, pp 591-596

NIH 4-27-60

118914

Sci - Medicine  
Jun 60

*An Electron Microscope Study of Plasmas Containing Deoxyribonucleic Acid, I: The Nucleoids of Bacteria in Active Growth, by A. Ryter.*

*GOVERNMENT USE ONLY*

*GERMAN, per, Z. Naturforsch. Vol 13b, 1958,  
pp 597-605.*

*NASA TT F 13076*

*sci/physics  
sept 70*

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NIH 6-20-61

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AEC Tr-4110

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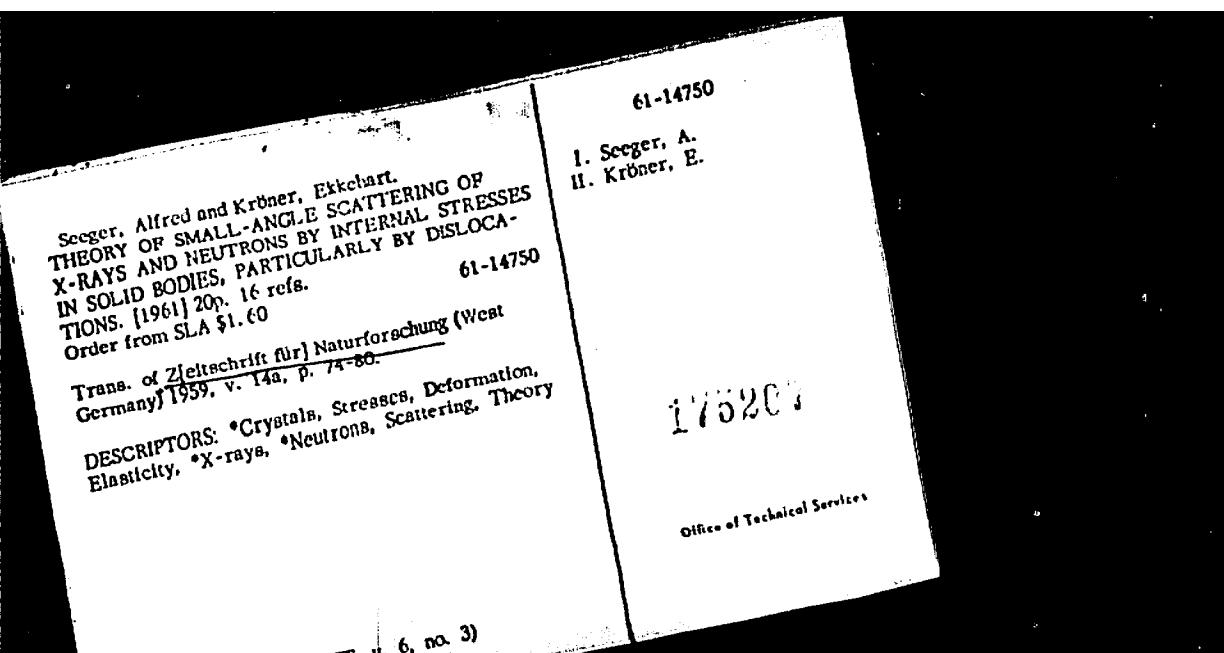
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NIH 11-7

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Language In Bu  
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1959, pp 154-164. P911067367  
AEC AERE-tr-1962

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ON THE MULTISCATTERING AND BACK-DIFFUSION  
OF RAPID ELECTRONS AFTER PASSAGE THROUGH  
THICK LAYERS. [1963] 24p (figs tables omitted) 25refs  
Order from SLA \$2.60 TT-63-20989

Trans. of Zeitschrift für Naturforschung (West  
Germany) 1959, v. 14a, p. 247-261. (Abstract  
available)

DESCRIPTORS: \*Electron beams, Scattering, Diffusion,  
\*Foil, \*Aluminum, \*Copper, \*Lead,  
Betatrons, Particle accelerator targets,

There are discussed the angle- and energy-distributions  
of the electrons scattered a metal foils (Al, Cu, Pb) by  
compiling examples of the various cases of interest in  
the practice. At this monoenergy electrons impinged at  
a kinetic energy of 1.75 MeV under various incidence  
angles on foils whose halfvalue angle gave at least 20deg  
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TT-63-20989

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The Edge Emission and Other Emissions of  
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NLL Ref: 8036.625 (195)

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On the Nature of the Bence-Jones Proteins,  
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EUROPEAN, per, Zeitschrift fuer Naturforschung,  
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Optical Research on the Semiconducting Solid Solution  
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1959, pp 374-379, 9072297.

ACSL No 1248

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Varying Oxygen Content, by R. Lindner, H. Matzke,  
6 pp.

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AEC AERE Tr 845

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ON THE FORCES OF INHOMOGENEOUS GASES ON  
SMALL SUSPENDED BODIES. [1963] 24p 20refs  
Order from SLA \$2.60 TT-64-10202

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Germany) 1959, v. 14a [no. 7] p. 589-599.

DESCRIPTORS: \*Aerosols, \*Gases, \*Thermal diffusion,  
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(Chemistry--Physical, TT, v. 11, no. 9)

TT-64-10202  
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On the Chemical Mechanism of the Photosynthesis,  
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<sup>Vol. X 1/2,</sup>  
GERMAN, par, Z fuer Naturforschung, 1959, pp 712-724.

MM 4-1-63

Sci - Chem

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NTC 69-10882-20L

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The Occurrence of Polyatomic Carbon Molecules in High  
Frequency Sparks Between Graphite Electrodes,  
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*Vol XIVA*  
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Ca Tr 84

Sci - Nuc Phys

AEC-NP-1001(draft)

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pp. 770-779, 1959.  
NIH-5-37-65  
SLA-TT-66-10970

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Polarization in the Acridine Cation - A  
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Changes in Semiconductors, by J. Appel,

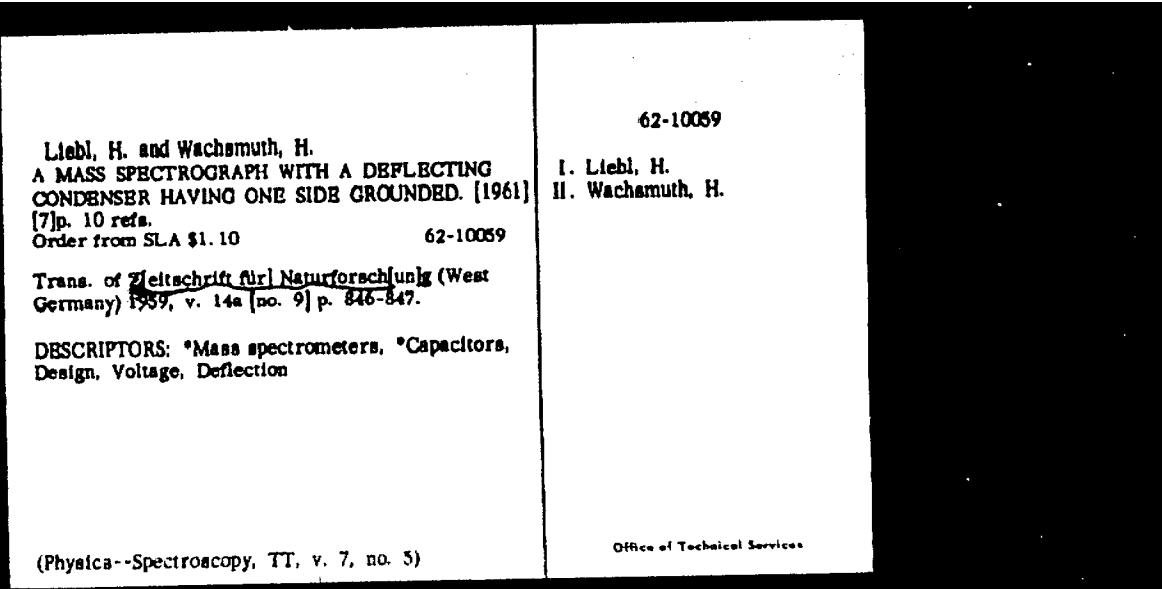
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Sci - Electronics

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Assoc Elec-Ind.  
Aldermaston, England  
Berkshire

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Solid Solutions of Bi<sub>2</sub>Te<sub>3</sub> and Sb<sub>2</sub>Te<sub>3</sub> as p-Conducting Materials for Semiconducting Thermo-Elements, by K. Smirnov, L. Stourac, 3 pp.

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CIA/PID IX-808

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Lithium-nickel oxide of lithium (CSIRO)

Sci - Chem

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Age Determinations on Stone Meteorites With the  
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AEC NP Tr-805

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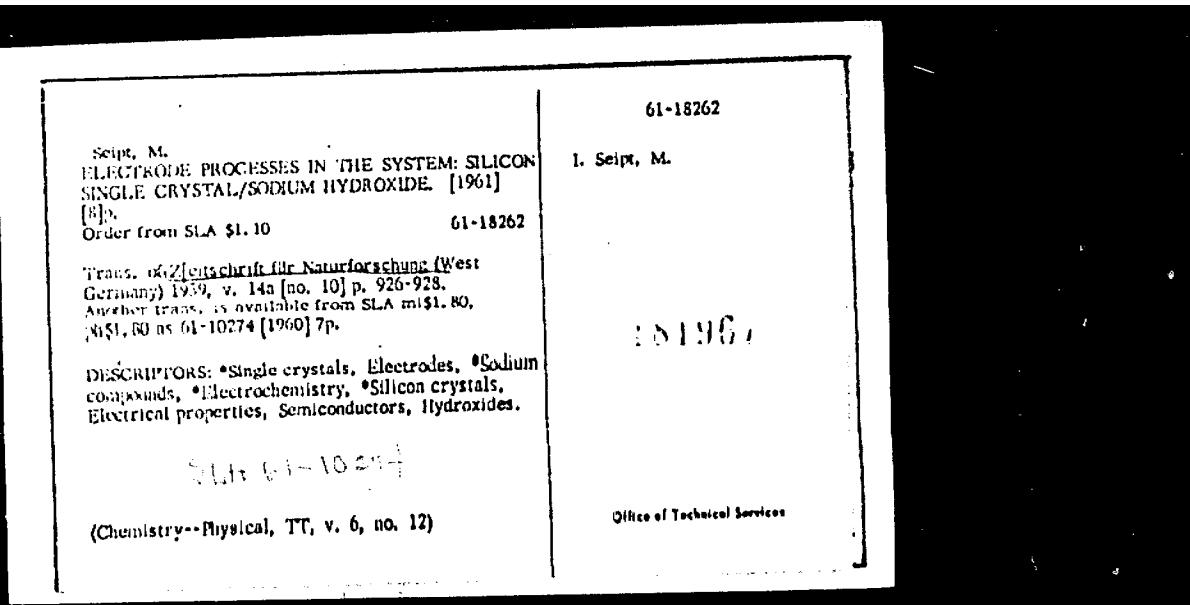
Behaviour of the Magnetic Susceptibility of  
InAs and InSb in Relation to Temperature, by  
G. Klemm, D. Geist, 3 pp. (9205637)

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pp 923-924.

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Sci - Phys  
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ON WHISKER-GROWTH DURING THE OXIDATION  
OF COPPER, I. (Über das Nadelwachstum bei der  
Oxidation von Kupfer, I.). [1963] [26p] (foreign text  
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Order from SLA \$2.60

63-18831

Trans. of Zeitschrift für Naturforschung (West  
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DESCRIPTORS: \*Copper, Oxidation, \*Whiskers  
(Crystallography), Growth, Foils, Metal films.

Electrolyte copper foils were oxidized at 300°C and  
500°C in the region of existence of CuO. The oxide  
surface was examined electron microscopically ac-  
cording to the carbon-evaporation technique, Bradley  
(Brit. J. Appl. Phys. 5: 65, 96; 1954). The length dis-  
tribution of the resulting oxide whiskers was determined  
stereoscopically for various oxidation sides. It may be  
(Physics--Solid State, TT, v. 10, no. 10) (over)

63-18831

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Diffusion of Radioactive Rare Gas in Uranium Oxide  
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GERMAN, per, Z für Naturforschung, Vol XIVa, 1959,  
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SLA 60-18070

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E. Kappler, F. J. Simon, 7 pp.

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SLA 60-16866

Sci  
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2 Jun 62

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MEH 4-8-60

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THE SIGNIFICANCE AND CALCULATION OF PRIMARY IONIZATIONS IN THEORY. (1960) 12p.  
16 refs.  
Order from SLA m\$2.40, ph\$3.30 61-10848

Trans. of Zeitschrift für Naturforschung (West Germany) 1959, v. 14b [no. 1] p. 33-37.

In practical agreement with the older literature, Pollard and co-workers accepted the 110 ev as the mean expenditure of energy per primary ionization in biological matter. According to experimental investigations on primary ionization in vapors containing hydrogen it must be assumed that in biological matter the mean expenditure of energy per primary ionization is at least 30% less than 110 ev. However, very probably the low energy primary ionizations (taking place individually in biological structures) have only an insignificantly small activity probability. (Author)

(Biological Sciences--Radiobiology, TC, v. 8, no. 9)

61-10848

1. Radiobiology
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Structure of Nucleus and Nucleoli, by G. Bopp-Hassenkamp,  
14 pp.

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WIIH 4-21-61

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Sci - Phys  
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Sci - Chemistry  
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CONCERNING THE FORMATION OF COLLAGEN FIBRILS FROM  
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NIH 6-27-62

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